

## STATELESS MESSAGE PROCESSING SCHEME FOR NETWORK PROCESSORS INTERACTIONS

### Abstract of the Disclosure

5           A stateless message-passing scheme for interactions between a network processor and a coprocessor is provided. The network processor, when receiving data frames for transmission from a network element to another network element encapsulates the entire packet that it receives within a frame. In this frame, there is provided a header field and a data field. The data field contains the data that needs to be transferred, and the header field contains all of the information regarding the deep-processing that the coprocessor is to perform so that no information of any type need be stored either by the network processor or separately regarding the processing of the data in the data packet. The coprocessor performs the operation designated by the header and returns the altered packet and header to the network processor.

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